

CLAIMS

1. A vehicle-related services system comprising:
at least one sensor automatically sensing at least one of the time during which a vehicle is not being operated and where said vehicle is located when it is not being operated; and
at least one data processor receiving information sensed by said at least one sensor, indicating at least one of the time during which said vehicle is not being operated and where said vehicle is located when it is not being operated and providing a billing data output in respect of a vehicle-related service which is dependent on at least one of the time during which said vehicle is not being operated and where said vehicle is located when it is not being operated.
2. A vehicle-related services system according to claim 1 and wherein said at least one sensor automatically senses the time of day and date when said vehicle is not being operated.
3. A vehicle-related services system according to claim 1 and wherein said at least one sensor automatically senses the time duration during which said vehicle is not being operated.
4. A vehicle-related services system according to claim 2 and wherein said at least one sensor automatically senses the time duration during which said vehicle is not being operated.
5. A vehicle-related services system according to claim 1 and wherein:
said at least one sensor automatically senses the time during which a vehicle is not being operated and where said vehicle is located when it is not being operated; and
said at least one data processor receives information sensed by said at least one sensor, indicating the time during which said vehicle is not being operated and where said vehicle is located when it is not being operated and provides a billing data output in respect of a vehicle-related service which is dependent on the time during which said

vehicle is not being operated and where said vehicle is located when it is not being operated.

6. A vehicle-related services system according to claim 5 and wherein:

said at least one sensor automatically senses the time during which a vehicle is parked and where said vehicle is located when it is parked; and

said at least one data processor receives information sensed by said at least one sensor, indicating the time during which said vehicle is parked and where said vehicle is parked and provides a parking data output in respect of parking, which is dependent on the time during which said vehicle is parked and where said vehicle is parked.

7. A vehicle-related services system according to claim 6 and wherein said at least one sensor and said at least one data processor are operative without vehicle operator initiative to provide an indication of at least one of the time during which said vehicle is parked and where said vehicle is parked.

8. A vehicle-related services system according to claim 6 and wherein said sensor is on-board said vehicle.

9. A vehicle-related services system according to claim 6 and also comprising:

at least one communicator on-board said vehicle providing an output indicating the time during which vehicle is parked and where said vehicle is parked; and

a receiver associated with said at least one data processor for receiving a communication from said at least one communicator and employing said communication for providing said information to said at least one data processor.

10. A vehicle-related services system according to claim 9 and wherein said communicator communicates with said receiver at least partially not in real time.

11. A vehicle-related services system according to claim 9 and wherein said communicator communicates with an intermediate storage and communication unit only

when a vehicle in which said communicator is located is at one of a plurality of predetermined locations.

12. A vehicle-related services system according to claim 11 and wherein said intermediate storage and communication unit is located at a vehicle fueling station.

13. A vehicle-related services system according to claim 6 and wherein said information includes identification of a street parking location in which said vehicle is stationary for at least a predetermined amount of time.

14. A vehicle-related services system according to claim 8 and wherein said at least one sensor is operative to sense the time during which a vehicle is not being operated without requiring interaction with an indicating device fixed in propinquity to said location.

15. A vehicle-related services system according to claim 6 and wherein said at least one sensor is operative using triangulation to determine where a vehicle is parked.

16. A vehicle-related services system according to claim 9 and also comprising at least one on-board vehicle potential additional parking space sensor which is operative when a vehicle is stationary at a street parking place for indicating whether at least one potential additional adjacent parking place is unoccupied.

17. A vehicle-related services system according to claim 16 wherein said at least one on-board vehicle communicator provides an output indicating existence of at least one potential unoccupied additional adjacent parking place, the system also comprising:

a street parking map database indicating legal street parking spaces;

a correlator receiving said output indicating existence of at least one potential unoccupied additional adjacent parking place and correlating it with said legal street parking spaces; and

an available parking communicator providing information regarding unoccupied legal street parking places to at least one driver.

18. A vehicle-related services system including:
 - a plurality of on-board potential additional parking space sensors located on a plurality of vehicles, which sensors each provide an output indicating existence of at least one potential unoccupied additional adjacent parking place adjacent a vehicle located in a street parking location; and
 - an available parking communicator employing information received from said plurality of sensors and providing information regarding unoccupied street parking places to at least one driver.
19. A vehicle-related services system according to claim 18 and also comprising:
 - a street parking map database indicating legal street parking spaces; and
 - a correlator receiving said output indicating existence of at least one potential unoccupied additional adjacent parking place and correlating it with said legal street parking spaces.
20. A vehicle-related services system according to claim 1 and wherein said at least one data processor comprises a vehicle insurance billing data processor.
21. A vehicle-related services system according to claim 20 and wherein said billing data comprises vehicle insurance billing data wherein the only variables, sensed by said on-board vehicle sensor, which are considered in said billing data are duration of vehicle operation and time of day or night of vehicle operation.
22. A vehicle-related services system according to claim 1 and wherein said billing data comprises vehicle insurance billing data wherein the said billing data is not dependent on vehicle speed.
23. A vehicle-related services system comprising:
 - at least one sensor on-board a vehicle and automatically sensing at least one of the time during which said vehicle is being operated and where said vehicle is located when it is being operated;

at least one communicator on-board said vehicle providing an output indicating at least one of the time during which said vehicle is being operated and where said vehicle is located when it is being operated; and

at least one data processor receiving a communication from said at least one communicator, indicating at least one of the time during which said vehicle is being operated and where said vehicle is located when it is being operated and providing a billing data output in respect of a vehicle-related service which is dependent only on at least one of the time during which said vehicle is being operated and where said vehicle is located when it is being operated.

24. A vehicle-related services system comprising:

at least one sensor on-board a vehicle and automatically sensing only at least one of the time during which said vehicle is being operated and where said vehicle is located when it is being operated;

at least one communicator on-board said vehicle providing an output indicating at least one of the time during which said vehicle is being operated and where said vehicle is located when it is being operated; and

at least one data processor receiving a communication from said at least one communicator, indicating at least one of the time during which said vehicle is being operated and where said vehicle is located when it is being operated and providing a billing data output in respect of a vehicle-related service which is dependent on at least one of the time during which said vehicle is being operated and where said vehicle is located when it is being operated.

25. A vehicle-related services system according to claim 23 and wherein said at least one data processor comprises a vehicle insurance billing data processor.

26. A vehicle-related services system according to claim 25 and wherein said communicator communicates with an intermediate storage and communication unit only when a vehicle in which said communicator is located is at one of a plurality of predetermined locations.

27. A vehicle-related services system according to claim 26 and wherein said intermediate storage and communication unit is located at a vehicle fueling station.

28. A vehicle-related services system according to claim 24 and wherein said at least one data processor comprises a vehicle insurance billing data processor.

29. A vehicle-related services system according to claim 25 and wherein said billing data comprises vehicle insurance billing data wherein the only variables, sensed by said on-board vehicle sensor, which are considered in said billing data are duration of vehicle operation and time of day or night of vehicle operation.

30. A vehicle-related services system according to claim 25 and wherein said billing data comprises vehicle insurance billing data wherein the only variables, sensed by said on-board vehicle sensor, which are considered in said billing data are duration of vehicle operation and location of the vehicle during said vehicle operation.

31. A vehicle-related services system according to claim 28 and wherein said billing data comprises vehicle insurance billing data wherein the only variables, sensed by said on-board vehicle sensor, which are considered in said billing data are duration of vehicle use and time of day or night of vehicle use.

32. A vehicle-related services system comprising:

at least one sensor on-board a vehicle and automatically sensing at least one of the time during which said vehicle is being operated and the distance traveled by said vehicle while it is being operated;

at least one communicator on-board said vehicle providing an output indicating at least one of the time during which said vehicle is being operated and the distance traveled by said vehicle while it is being operated; and

at least one data processor receiving a communication from said at least one communicator, indicating at least one of the time during which said vehicle is being operated and the distance traveled by said vehicle while it is being operated; and providing a billing data output in respect of a vehicle-related service which is dependent

only on at least one of the time during which said vehicle is being operated and the distance traveled by said vehicle while it is being operated.

33. A vehicle-related services system according to claim 32 and wherein said at least one data processor comprises a vehicle insurance billing data processor.

34. A vehicle-related services system according to claim 33 and wherein said billing data comprises vehicle insurance billing data wherein the only variables, sensed by said on-board vehicle sensor, which are considered in said billing data are time of day and date of vehicle operation and distance covered during said vehicle operation.

35. A vehicle-related services system according to claim 33 and wherein said communicator communicates with an intermediate storage and communication unit only when a vehicle in which said communicator is located is at one of a plurality of predetermined locations.

36. A vehicle-related services system according to claim 35 and wherein said intermediate storage and communication unit is located at a vehicle fueling station.

37. A vehicle-related services system according to claim 25 and wherein said billing data comprises vehicle insurance billing data wherein the said billing data is not dependent on vehicle speed.

38. A vehicle-related services system according to claim 23 and wherein said at least one data processor comprises a vehicle parking billing data processor.

39. A vehicle-related services system according to claim 38 and wherein said at least one sensor and said at least one data processor are operative without vehicle operator initiative to provide an indication of at least one of the time during which said vehicle is parked and where said vehicle is parked.

40. A vehicle-related services system according to claim 38 and wherein said at least one sensor is operative to sense the time during which a vehicle is being operated without requiring interaction with an indicating device fixed in propinquity to said location.

41. A vehicle-related services system according to claim 38 and wherein said communicator communicates with said at least one data processor at least partially not in real time.

42. A vehicle-related fee payment system comprising:

at least one sensor on-board a vehicle and automatically sensing at least one of the time during which said vehicle is being operated and where said vehicle is located when it is being operated;

at least one communicator on-board said vehicle providing an output indicating at least one of the time during which said vehicle is being operated and where said vehicle is located when it is being operated; and

at least one data processor receiving a communication from said at least one communicator, indicating at least one of the time during which said vehicle is being operated and where said vehicle is located when it is being operated and providing a billing data output in respect of a vehicle-related use fee which is dependent on the time during which said vehicle is being operated.

43. A vehicle-related fee payment system according to claim 42 and wherein said communicator communicates with said at least one data processor at least partially not in real time.

44. A vehicle-related fee payment system according to claim 42 and wherein said communicator communicates with an intermediate storage and communication unit only when a vehicle in which said communicator is located is at one of a plurality of predetermined locations.

45. A vehicle-related fee payment system according to claim 44 and wherein said intermediate storage and communication unit is located at a vehicle fueling station.

46. A vehicle-related fee payment system according to claim 42 and wherein said at least one data processor provides a billing data output in respect of a vehicle-related use fee which is dependent on the duration of vehicle operation and time of day of vehicle operation.

47. A vehicle-related fee payment system according to claim 46 and wherein said at least one data processor provides a billing data output in respect of a vehicle-related use fee which is also dependent on where said vehicle is located during vehicle operation.

48. A vehicle-related fee payment system according to claim 42 and wherein said billing data output is dependent on the time during which said vehicle is being operated and on a level of pollution being created by said vehicle.

49. A vehicle-related fee payment system comprising:
at least one sensor for automatically sensing the passage of a vehicle along a given road;
at least one data processor receiving a communication from said at least one sensor, indicating the passage of said vehicle along a given road at a given time and providing a billing data output in respect of a vehicle-related use fee which is dependent only on the time during which said vehicle is passing along said given road.

50. A vehicle-related fee payment system comprising:
at least one sensor on-board a vehicle and automatically sensing at least one of the time during which said vehicle is being operated and where said vehicle is located when it is being operated;
at least one communicator on-board said vehicle providing an output indicating at least one of the time during which said vehicle is being operated and where said vehicle is located when it is being operated; and

at least one data processor receiving a communication from said at least one communicator, indicating at least one of the time during which said vehicle is being operated and where said vehicle is located when it is being operated and providing a billing data output in respect of a vehicle-related use fee which is dependent on the region in which a vehicle is operating and the time of day during which said vehicle is being operated in said region.

51. A vehicle-related services method comprising:

automatically sensing the time during which a vehicle is not being operated and where said vehicle is located when it is not being operated; and

receiving information indicating the time during which said vehicle is not being operated and where said vehicle is located when it is not being operated and providing a parking data output in respect of a vehicle-related service which is dependent on the time during which said vehicle is not being operated and where said vehicle is located when it is not being operated.

52. A vehicle-related services method according to claim 51 and providing an indication of the time during which said vehicle is parked and where said vehicle is parked substantially without operator intervention.

53. A vehicle-related services method according to claim 51 and also comprising communicating an indication of the time during which said vehicle is parked and where said vehicle is parked to a receiver at least partially not in real time.

54. A vehicle-related services method according to claim 51 and wherein said automatic sensing takes place without requiring interaction with an indicating device fixed in propinquity to a parking location.

55. A vehicle-related services method including:

providing outputs indicating existence of at least one potential unoccupied additional adjacent parking place adjacent a plurality of vehicles located in street parking locations; and

employing said outputs received from said plurality of vehicles and providing information regarding unoccupied street parking places to at least one driver.

56. A vehicle-related services method comprising:

automatically sensing at least one of the time during which said vehicle is being operated and where said vehicle is located when it is being operated;

communicating an output indicating at least one of the time during which said vehicle is being operated and where said vehicle is located when it is being operated; and

receiving a communication indicating at least one of the time during which said vehicle is being operated and where said vehicle is located when it is being operated and providing an insurance billing data output in respect of vehicle insurance which is dependent only on at least one of the time during which said vehicle is being operated and where said vehicle is located when it is being operated.

57. A vehicle-related services method according to claim 56 and wherein said communicating takes place only when a vehicle is at one of a plurality of predetermined locations.

58. A vehicle-related services method according to claim 56 and wherein said billing data comprises vehicle insurance billing data wherein the only automatically sensed variables which are considered in said billing data are duration of vehicle operation and time of day or night of vehicle operation.

59. A vehicle-related fee payment method comprising:

automatically sensing at least one of the time during which said vehicle is being operated and where said vehicle is located when it is being operated;

providing an output indicating at least one of the time during which said vehicle is being operated and where said vehicle is located when it is being operated; and

receiving said output indicating at least one of the time during which said vehicle is being operated and where said vehicle is located when it is being operated and

providing a billing data output in respect of a vehicle-related use fee which is dependent on the time during which said vehicle is being operated.

60. A vehicle-related fee payment method according to claim 59 and wherein said billing data output in respect of a vehicle-related use fee is dependent on the duration of vehicle operation and time of day of vehicle operation.

61. A vehicle-related fee payment method according to claim 59 and wherein said billing data output is dependent on the time during which said vehicle is being operated and on a level of pollution being created by said vehicle.

62. A vehicle-related services method comprising:

automatically sensing the time during which said vehicle is being operated and the distance traveled by said vehicle while it is being operated;

communicating an output indicating the time during which said vehicle is being operated and the distance traveled by said vehicle while it is being operated; and

receiving a communication indicating the time during which said vehicle is being operated and the distance traveled by said vehicle while it is being operated and providing an insurance billing data output in respect of vehicle insurance which is dependent only on the time during which said vehicle is being operated and the distance traveled by said vehicle while it is being operated.

63. A vehicle-related services method according to claim 62 and wherein said billing data comprises vehicle insurance billing data wherein the only automatically sensed variables which are considered in said billing data are the distance traveled by said vehicle while it is being operated and time of day or night of vehicle operation.